

J. MacKENZIE.
SEAL LOCK.

APPLICATION FILED MAR. 11, 1912.

1,040,713.

Patented Oct. 8, 1912.

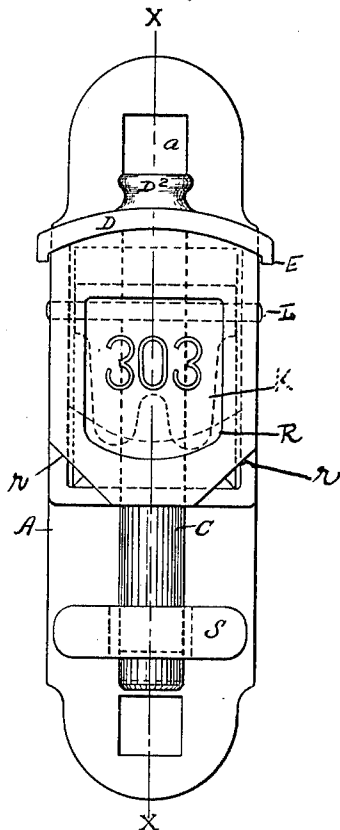


Fig. 1.

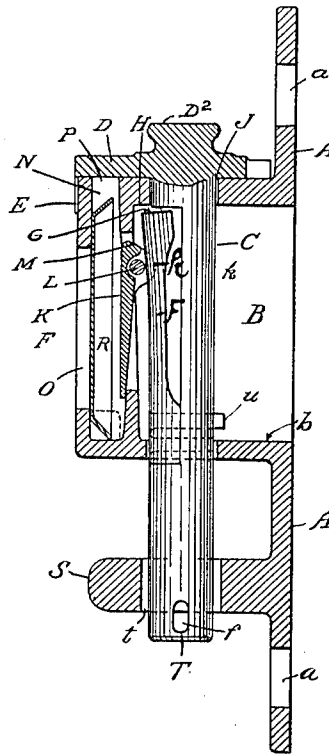


Fig. 2.

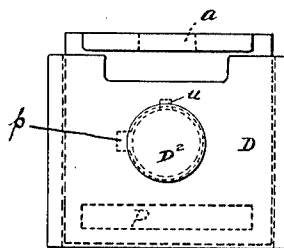


Fig. 3.

WITNESSES:
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UNITED STATES PATENT OFFICE.

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SEAL-LOCK.

1,040,713.

Specification of Letters Patent.

Patented Oct. 8, 1912.

Application filed March 11, 1912. Serial No. 682,975.

To all whom it may concern:

Be it known that I, JOHN MACKENZIE, a citizen of the United States of America, residing at No. 1109 Twenty-fifth street, in the city of Watervliet, in the county of Albany and State of New York, have invented certain new and useful Improvements in Seal-Locks, of which the following is a specification.

My invention relates to seal locks, and the object of my invention is to provide a means for locking and sealing a door or other apartment so that it cannot be opened without destroying the seal; together with such other elements and combinations as are hereinafter more particularly set forth and claimed.

I accomplish these objects by means of the mechanism illustrated in the accompanying drawing, in which:

Figure 1 is a plan. Fig. 2 is a section along the line X—X on Fig. 1. Fig. 3 is a top plan view.

Similar letters refer to similar parts throughout the several views.

Because of the rough usage and the exposure incident to railway traffic, it is necessary that the seal lock should be so constructed that it will not get out of commission by the action of the elements or the accumulation in the working parts of dirt, dust, snow and ice. It is also necessary to provide a means for preventing the separation or loss of the parts necessary for making the apparatus effective.

I construct a casting, A, provided with a chamber, B, through which a bolt, C, may reciprocate. The end of the bolt, C, is provided with a cap, D, preferably formed integral therewith, having a downwardly extending flange, E, along the front and sides thereof. The bolt, C, is provided with a longitudinal recess into which is placed a spring tongue, F, so placed in the bolt, C, that it will project from one side of the bolt, as shown in Fig. 2, when it will prevent the bolt, C, from being withdrawn from the chamber, B, because the end, G, thereof will engage the upper surface, H, of the chamber, B, as shown in Fig. 2. In order to force the tongue, F, into the bolt, C, sufficiently to permit the bolt to pass through the opening, J, therefor, in the upper wall, H, of the chamber, B, I arrange a swinging plate, K, provided with ears, L, mounted on a rod, I, which passes through the opposite walls of

the chamber, B, about which rod the plate may swing. One end, M, of the plate, K, will press against the tongue, F, when the plate, K, is swung upwardly, and by this means the tongue may be forced into the bolt, C, thereby permitting the bolt to be pushed upwardly in a direction necessary for raising the cap, D, from the upper surface, H, of the chamber, B.

Forward of the chamber, B, I arrange the chamber, N, which is open in front at O, and at the top, P, into which chamber I place a seal, R, which may have on its outer surface a designating figure, character or number—303—in Fig. 1. The seal, R, is preferably made of metal or thin japan ware, or similar substance, and when placed in the chamber, N, and the bolt, C, is in the position shown in Fig. 2, (the cap, D, covering the chamber, N,) it is impossible to remove the bolt, because the tongue, F, thereof will engage the upper surface, H, of the chamber, B, and the plate, K, is protected by the seal, R. It is understood that a hasp may be placed over the staple, S, before the end, T, of the bolt is placed through the opening, t, in the staple, whereby it is necessary to raise the bolt, C, to allow the hasp to be removed from the staple.

In order to prevent the bolt, C, from being lost, misplaced or removed from the lock, I preferably place a pin, u, through the bolt just above the lower surface, b, of the chamber, B, which pin will engage the upper surface, H, of the chamber, B, and prevent the bolt from becoming disengaged from the lock.

In order to place the bolt, C, provided with its projecting pin, u, into the casting, A, I cut a suitable groove, p, through the upper portion, H, as shown by dotted lines in Fig. 3, whereby the pin, u, may be passed through the groove, p, and then the bolt, C, may be turned so that the pin, u, will be out of alinement with the groove. It will be impossible to remove the bolt, C, while the lock is secured to a car, because the cap, D, is so large that it cannot be so turned in the casting without projecting over the side of the casting through which the openings, a, a, are made for the purpose of securing the casting to the door. The cap, D, covering the chamber, N, prevents dirt, snow, ice and other foreign matter from getting into the chamber and interfering with the easy working of the spring tongue, F, and plate, K.

My seal lock may be attached to the side or door of a car by means of suitable bolts, not shown, passing through the openings, *a, a*, in the casting, *A*. It is apparent that in order to open a door which has been sealed by my lock, it will be necessary to break the metallic seal. I place a slot, *f*, in the bolt, *C*, preferably below the staple, *S*, when the bolt is in its locked position, through which a ribbon seal (not shown) may be used if desired. I preferably construct a knob, *D*², on the cap, *D*, in order to conveniently grasp the cap when I desire to elevate the bolt, *C*. I preferably cut away the lower portion of the front of the chamber, *N*, at its lower corners, *r, r*, leaving a communication between the lower portion of the chamber, *N*, in the outside of the lock for the purpose of allowing any dirt, snow or accumulation, that might otherwise be deposited therein, to escape.

What I claim as my invention and desire to secure by Letters Patent, is:

1. A lock adapted for use on railway cars, comprising a casting provided with a chamber and a staple; a bolt adapted to reciprocate in said chamber and pass through an opening in the staple; a spring tongue in said bolt adapted to project beyond the opening through which the bolt reciprocates when the bolt is inserted in the opening in the staple; a swinging plate; a means for mounting said plate in said casting, whereby one end of the plate will engage the said

spring tongue, when the other end thereof is swung away from the bolt, and press the spring tongue into the bolt; a seal adapted to be placed into the casting forward of and preventing the operation of said swinging plate; a cap on the end of said bolt adapted to cover said seal.

2. A seal lock comprising a casting provided with a chamber; a bolt adapted to reciprocate in said chamber; a cap attached to said bolt; a spring mounted in said bolt; a means for compressing said spring; a seal placed in said casting in such relation to said means for compressing said spring that said means cannot be operated during the presence of the spring in its normal condition.

3. A seal lock, comprising a casting provided with a chamber; a bolt adapted to reciprocate therethrough; a spring secured in said bolt adapted to project therefrom; a means for compressing said spring and thus permitting said bolt to be reciprocated in said chamber; a means for preventing said bolt from being removed from said casting; and a means for preventing the operation of said spring compressing means, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOHN MACKENZIE.

Witnesses:

FREDERICK W. CAMERON,
S. J. LEAKE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."